

CLAIMS:

What is claimed is:

- Sub A* 1. A method for calculating a measure in a database  
5 having a plurality of stars, each of the stars comprising a  
fact table and a table for each supported dimension, set of  
dimension indicators associated with a particular dimension  
whereby the dimension indicator indicates a level of  
aggregation associated, said method comprising:  
10 selecting a stargroup associated with the  
measure, said stargroup comprising one or more stars  
comprising a set of dimension indicators, each of said  
dimension indicators associated with a particular  
dimension, and wherein each dimension indicator indicates a  
15 level of aggregation of an associated table comprising  
aggregated facts with respect to the associated dimension;  
selecting a particular star of the one or more  
stars; and  
querying the tables comprising facts.

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2. The method of claim 1, wherein selecting the  
particular star further comprises:

comparing one or more dimension indicators of each of the one or more stars to one or more requested levels.

5        3. The method of claim 2, wherein comparing one or more dimension indicators of each of the one or more stars to one or more levels further comprises:

comparing each of the one or more stars, wherein each star is associated with a table of aggregated facts of  
10 successively lower aggregation.

4. The method of claim 2, wherein selecting the particular star further comprises:

selecting the particular star wherein each of the  
15 dimension indicators is equal to or exceed each of the requested levels.

5. The method of claim 1, further comprising:

receiving a request for calculating a metric,  
20 wherein said request to calculate a metric is associated with one or more levels of one or more dimensions; and

retrieving a metric definition associated with the metric, wherein the metric definition comprises the measure.

5        6. A computer-readable medium carrying one or more sequences of instructions for calculating measures, said instructions comprising:

selecting a stargroup associated with the measure, said stargroup comprising one or more stars  
10 comprising a set of dimension indicators, each of said dimension indicators associated with a particular dimension, and wherein each dimension indicator indicates a level of aggregation of an associated table comprising aggregated facts with respect to the associated dimension;

15        selecting a particular star of the one or more stars; and

      querying the tables comprising facts and associated dimensions.

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      7. The computer readable medium of claim 6, wherein the instructions for selecting the particular star further comprises instructions for:

comparing one or more dimension indicators of  
each of the one or more stars to one or more requested  
levels.

5        8. The computer readable medium of claim 7, wherein  
the instructions for comparing one or more dimension  
indicators of each of the one or more stars to one or more  
levels further comprises instructions for:

10        comparing each of the one or more stars, wherein  
each star is associated with a table of aggregated facts of  
successively lower aggregation.

15        9. The computer readable medium of claim 7, wherein  
the instructions for selecting the particular star further  
comprises instructions for:

selecting the particular star wherein each of the  
dimension indicators is equal to or exceed each of the  
requested levels.

20        10. The computer readable medium of claim 6, wherein  
the sequences of instructions further comprise:

receiving a request for calculating a metric,  
wherein said request to calculate a metric is associated  
with one or more levels of one or more dimensions; and

retrieving a metric definition associated with  
5 the metric, wherein the metric definition comprises the  
measure.

11. A system for calculating measures, said system  
comprising:

10 a first memory means for storing a star  
identifier identifying a star associated with a particular  
fact table; and

a second memory means for storing an array of  
dimension indicators.

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12. The system of claim 11, further comprising:

a third memory means for storing the aggregate  
fact table, wherein the aggregate fact table is aggregated  
with respect to at least one dimension at a particular  
20 level.

13. The system of claim 12, wherein at least one of  
the dimension indicators corresponds to the at least one

dimension, and wherein at least one indicator is indicative of the particular level.

14. The system of claim 11, further comprising:

5 a first plurality of memory means, wherein each of the first plurality of memory means stores a first corresponding plurality of stars, wherein each of the first plurality of stars is associated with a corresponding one of a first plurality of aggregate fact tables, and wherein  
10 each of the first aggregate fact tables support a first measure;

a second plurality of memory means, wherein each of the second plurality of memory means stores a corresponding one of a first plurality arrays for storing  
15 dimension indicators.

15. The system of claim 14, wherein the first plurality of memory means stores the stars based on the degree of aggregation of the first aggregate fact tables  
20 associated therewith.

16. The system of claim 14, further comprising:

a third plurality of memory means, wherein each of the second plurality of memory means stores a second corresponding plurality of stars, wherein each of the  
5 second plurality of stars is associated with a corresponding one of a second plurality of aggregate fact tables, and wherein each of the second plurality of aggregate fact tables support a second measure;

a fourth plurality of memory means, wherein each  
10 of the fourth plurality of memory means stores a corresponding one of a second plurality arrays for storing dimension indicators.